### $Nettleton\ Public\ Schools-Jonesboro,\ AR$

# **EDU2011**



#### Required Information - Description

"Schools have made significant uses of assessment and instructional technologies that help promote learning for all students, whereas technologies for learners, such as mobile devices, video games, and social networking sites, are typically excluded from school contexts." (Halverson, Smith, 2010.)

The benefits of using netbooks in the classroom are insurmountable, especially when examining them from a young teen's perspective. By looking at the use of the netbooks in a specific class, in this case 9th grade physical science, it becomes apparent that the teacher has the ability to provide digital access to various textbooks in one location. The textbooks used at Nettleton High School in the 9th grade science class alone cover a broad range of topics, and throughout the year more than one textbook is used. For students this means that the things they enjoy about one textbook get lost when they switch over to another. Not to mention the textbooks that must be carried from classroom to classroom are a heavy physical burden.

The student also has the option of having the text read out loud using Audible.com or other Web 2.0 programs, which can be translated in other languages for our ELL students. This eliminates the difficulties the student and the teacher would face when switching from one text to another. Also, because it is presented in the same format the student will not be confused as easily because he/she is always using the same device.

English proficiency or require special services (Echevarria, Vogt & Short, 2008). This is addressed by the netbook as each student has the opportunity to select the appropriate font size for his or her comfort. It has been observed in middle schools that the "optimal font size for 'normal' readers is larger than average" (EduKindle, 2010). ELL students need additional help when it comes to reading words. Unlike the "average" student, ELL students are still learning how to sound out the

word, how to understand what that word means, and then use it in the appropriate context. The support of the netbook allows the student to get additional help when needed by utilizing available dictionaries like www.dictionary.com for example.

Another benefit of the netbook for teachers and students alike is its versatility. The netbook allows teachers to provide their students textbook readings, supplemental books that coincide with the content being taught, and also access to Exam View software questions. Teachers can upload specific questions from Exam View to the netbook where students can have a digital version of the exam read out loud as they take the test. The students now have the ability to get the test read to them while remaining in the classroom and taking the hard copy version of the test at the same time. Research indicates that audio testing positively impacts reading comprehension (Laitusis, 2010).

One of the main benefits of providing the netbooks with the data plan to students will be the ability to access the Internet off school premises. A great number of our students do not currently have Internet access at home and this service will ensure that all students are guaranteed equal access for assignments and Internet research during after schools hours. We currently have three mobile labs for use in the classrooms, but nothing is available to students once they leave campus.

#### **Implementation**

According to Hall "The hardest thing about technology is not selling them on it. It is getting them to use it!" This encompasses the limitation placed on the integration of technology in today's schools and classrooms due to the challenges involved in the presence of so many new forms of technology equipment and innovations that are thrown at teachers with alarming speed. While a natural characteristic of technology education is the continual development of new and exciting technologies and creating innovative applications for existing ones, the "Achilles Heel" falls with the implementation process. The method of the implementation of technology is as important, if not more so, than the types of technology that are implemented.

In order to be successful you must have teachers 100% on board, which makes perfect sense. The past failures of implementation deal more with not recognizing the value of those challenges and focusing on getting the equipment than providing quality training in a systematic and controlled manner. It would be hard to argue with the statement "...the main causes of failure have not been the technology innovations, but rather that the failures have had more to do with under appreciating the challenge of implementation" (Hall, 2010). In order to implement the netbook program, the following ideas must be executed:

- 1. Teachers will engage in ongoing training and will be helped to construct a student centered learning classroom. Professional development will involve teachers in designing technology-supported learning activities. Means stated, "Technology adoption and implementation require not just funding resources but also ongoing effort." Detailed ongoing professional development must be provided in order for teachers to "cross the chasm" from conservative novice technology user to die hard technology enthusiast. Teachers and students must be shown how to effectively use the netbook in the classroom and be provided ample time to actively engage in practicing good strategies. Training began for teachers during the 2009 school year because we received an EETT Grant that provided mobile labs and other technology equipment. This training has and will continue and become more content specific and focused over summer professional development in 2010, then continue throughout the school year. We have utilized our on-site staff and partnered with Arkansas State University in order to fill the needs of the more specific content areas of Math and Science.
- 2. Nettleton High School is in Year Two School Improvement; therefore, a major focus is test scores. We are hoping that the implementation of netbooks will assist in this area. We will use The Learning Institute data and state test scores as a guide to see if netbooks are a valuable asset to our program.

The Superintendent, Assistant Superintendents and the Technology Department staff have met with Verizon Wireless on two separate occasions (October 29, 2010 and November 16, 2010) and discussed all project costs, training, available equipment and services.

#### **Evaluation**

Program evaluation will be based on the comparison of state assessments and teacher/students surveys which will be conducted both pre and post netbook implementation.

Teachers can easily evaluate the benefits of the netbook by allowing students to take exams with the device, which is the state goal in 2014. As the student's netbook user progress increases the teacher can provide supplemental assignments and creative projects that increase in difficulty in conjunction with higher level questioning to assess student use and comprehension of material. Also, teachers must not forget to allow the students to claim ownership of their learning. Students should be provided with opportunities to select tools and websites of their own choosing and then exhibit what they learned by giving an oral presentation, writing a brief summary, or perhaps constructing their own evaluative project.

The poverty level based on the percentage of students eligible for free/reduced lunch under the National School Lunch Program (NSLP) is 59%. The current discount rate of the school this year is 80%. The district utilized approximately \$1.5 million of the American Recovery and Reinvestment Act funds that we received in order to provide presentation systems such as interactive whiteboards and document cameras plus laptops and projectors for each teacher in the district. We also used those funds to strengthen our infrastructure and provide more bandwidth for each school building. In order to now take this a step further, we would like to give the students or at least a small sampling of students the ability to utilize this equipment and the netbooks to further engage and develop instruction.

The costs associated with the plan include a monthly connection fee for data plan for each netbook (250) of \$42.07 each that totals \$10517.50 per month for 10 months. The cost of each netbook is \$19.95 through Verizon Wireless with data plan contract. The district provides an

Instructional Technology/Curriculum Specialist that will provide all training and materials, which will be approximately \$75,000.

The school has provided an updated infrastructure that will allow for the use of netbooks for each student in the 9<sup>th</sup> grade. The entire building has wireless Internet. The school is committed to providing sustained and rigorous training of staff and students, purchasing netbooks for each 9<sup>th</sup> grader, and any other unforeseen costs. Funds will come from the regular budget provided by local and state revenues. The district will provide appropriate personnel and needed equipment including the addition of technology department staff to include four full-time IT technicians and full-time Instructional Technology/Curriculum Specialist.

The effect that EDU2011 will have on teachers and students by providing off-premise connectivity will be undeniable. Tutoring through use of built in web cams and free sources, utilization of free Web. 2.0 tools and extra time to perform research and develop much needed computer skills will be extremely beneficial especially for our low-socioeconomic students who have no Internet access from home.

The cost to provide at home access to each of the students in the program would be astronomical and too far-reaching for the district. Hand-held devices such as iPods or cell phones can cost up to \$699, each which greatly exceeds the cost of \$19.95 per netbook we have been quoted by Verizon.

The Nettleton Public Schools' current Technology Plan is on file with the state department. The approved addendum that includes the netbooks is included in this application as Appendix C. The district's long-term objective is to continue implementation with these 9th graders as they progress through high school, and then add subsequent 9th grade students. Our goal is to include

Verizon Wireless will allow us to run the netbooks through the school filter ensuring compliance with CIPA laws and regulations. The school's Acceptable Use Policy is also attached.

#### **School Information**

#### **Required Information (schools only)**

Nettleton High School (Billed Entity #139582) is located in Craighead County,

Arkansas, in the central portion of the county. The district covers 42 square miles and is bordered
by the districts of Jonesboro, Brookland, Bay-Brown, and Valley View. Nettleton Public

Schools is comprised of 7 campuses -- Fox Meadow Elementary (K-2), University Heights

Elementary (K-2), Fox Meadow Intermediate Center (3-5), Nettleton Intermediate Center (3-5),

Nettleton Middle School (6), Nettleton Junior High School (7-8), and Nettleton High School (9
12). Current enrollment is 3187 students. Of the total students, 997 are white male; 954 white

female; 496 black male; 481 black female; 84 Hispanic male; 99 Hispanic female; 30 Asian

male; 34 Asian female; a total of 12 students are Native American; Out of this total population
59% qualify for free and reduced lunches. The district has 212 enrolled in the gifted/talented

program; 84 homeless children; 417 special education students (5 of which have a handicapping
condition); 15 migrant students and 7 foster children.

This program will encompass approximately 250 9<sup>th</sup> grade students at Nettleton High School who will each receive a netbook computer with data plan. Each 9<sup>th</sup> grade teacher will receive one as well. There are currently fifteen 9<sup>th</sup> grade teachers. Curriculum objectives that will be addressed using this program include but are not limited to the NETs:

#### 1. Creativity and Innovation

Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology. Students:

- a. apply existing knowledge to generate new ideas, products, or processes
- b. create original works as a means of personal or group expression

EDU2011

- c. use models and simulations to explore complex systems and issues
- d. identify trends and forecast possibilities

#### 2. Communication and Collaboration

Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.

Students:

- a. interact, collaborate, and publish with peers, experts, or others employing a variety of digital environment and media
- b. communicate information and ideas effectively to multiple audiences using a variety of media and formats
- c. develop cultural understanding and global awareness by engaging with learners of other cultures
- d. contribute to project teams to produce original works or solve problems

#### 3. Research and Information Fluency

Students apply digital tools to gather, evaluate, and use information.

Students:

- a. plan strategies to guide inquiry
- b. locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media
- c. evaluate and select information sources and digital tools based on the appropriateness to specific tasks
- d. process data and report results

#### 4. Critical Thinking, Problem Solving, and Decision Making

Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.

#### Students

- a. identify and define authentic problems and significant questions for investigation
- b. plan and manage activities to develop a solution or complete a project
- c. collect and analyze data to identify solutions and/or make informed decisions
- d. use multiple processes and diverse perspectives to explore alternative solutions

#### 5. Digital Citizenship

Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior. Students:

- a. advocate and practice safe, legal, and responsible use of information and technology
- b. exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity
- c. demonstrate personal responsibility for lifelong learning
- d. exhibit leadership for digital citizenship

#### 6. Technology Operations and Concepts

Students demonstrate a sound understanding of technology concepts, systems, and operations.

#### Students:

- a. understand and use technology systems
- b. select and use applications effectively and productively
- c. troubleshoot systems and applications
  - d. transfer current knowledge to learning of new technologies

#### References

- Crosson, A., & Lesaux, N. (2010). Revisiting Assumptions About the Relationships of Fluent

  Reading to Comprehension: Spanish-speakers' text reading fluency in English. Reading &

  Writing, 23(5), 475-494.
- Echevarria, J., Vogt, M.E., & Short, D. J. (2008). *Making Content comprehensible for English Learners: The SIOP Model* (3rd ed.). Boston, MA: Pearson.
- Hall, G. (2010). Technology's Achilles Heel: Achieving High-Quality Implementation. Journal of research and Technology in Education. 42(3), 231-253.
- Halverson, R., & Smith, A. (2010). How New Technologies Have (and Have Not) Changed

  Teaching and Learning in Schools. *Journal of Computing in Teacher Education*, 26(2), 49-54.
- It's Not the Kindle, Stupid! It's the Text. (2010, May 21). Retrieved June 3, 2010, from http://www.edukindle.com/category/the-kindle-in-the-classroom/
- Krashen, S. (2003). Three Roles for Reading for Miniority-Language Children. In G. Garcia (Ed.)

  English Learners: Reaching the Highest Level of Literacy Learning. Newark, DE:

  International Reading Association.
- Laitusis, C. (2010). Examining the Impact of Audio Presentation on Tests of Reading Comprehension. *Applied Measurments in Education*, 23(2), 153-167.
- Means, B. (2010). Technology and Education Change: Focus on Student Learning. *Journal of research and Technology in Education*. 42(3), 285-307.

#### Appendix A

#### 4.29—STUDENT COMPUTER USE POLICY

The Nettleton School District makes computers and/or computer Internet access available to students, to permit students to perform research and to allow students to learn how to use computer technology. Use of district computers is for educational and/or instructional purposes only. It is the policy of this school district to equip each computer with Internet filtering software designed to prevent users from accessing material that is harmful to minors. No student will be granted Internet access until and unless a computer-use agreement, signed by both the student and the parent or legal guardian (if the student is under the age of eighteen [18]) is on file. The current version of the computer use agreement is incorporated by reference into board policy and is considered part of the student handbook.

Student use of computers shall only be as directed or assigned by staff or teachers; students are advised that they enjoy no expectation of privacy in any aspect of their computer use, including email, and that monitoring of student computer use is continuous. Students must not disable or bypass security procedures, compromise, attempt to compromise, or defeat the district's technology network security or Internet filtering software, alter data without authorization, or disclose passwords to other students. Students who misuse district-owned computers or Internet access in any way, including using computers to violate any other policy or contrary to the computer use agreement, or using the computers to access or create sexually explicit or pornographic text or graphics, will face disciplinary action, as specified in the student handbook<sup>2</sup> and/or computer use agreement.

In an effort to help protect student welfare when they navigate the Internet, the district will work to educate students about appropriate online behavior, including interacting with other individuals on social networking websites and in chat rooms and cyberbullying awareness and response.

Legal References: Children's Internet Protection Act; PL 106-554

20 USC 6777 47 USC 254(h) A.C.A. § 6-21-107 A.C.A. § 6-21-111

Date Adopted: June 2010 Last Revised: June 2010

EDU2011

#### Appendix B

#### 4.29F—STUDENT INTERNET USE AGREEMENT

Student's Name (Please Print)	Grade Level
School	Date

The Nettleton School District agrees to allow the student identified above ("Student") to use the district's technology to access the Internet under the following terms and conditions:

- 1. Conditional Privilege: The Student's use of the district's access to the Internet is a privilege conditioned on the Student's abiding to this agreement. No student may use the district's access to the Internet unless the Student and his/her parent or guardian have read and signed the student handbook.
- 2. Acceptable Use: The Student agrees that he/she will use the District's Internet access for educational purposes only. In using the Internet, the Student agrees to obey all federal and state laws and regulations. The Student also agrees to abide by any Internet use rules instituted at the Student's school or class, whether those rules are written or oral.
- 3. Penalties for Improper Use: If the Student violates this agreement and misuses the Internet, the Student shall be subject to disciplinary action.

Disciplinary Actions: All violations will be handled as any other infraction of school board policy. Disciplinary actions may include:

- 1. Revocation of computer access.
- 2. Financial restitutions.
- 3. Suspension, expulsion, academic failure due to lack of course completion, or other penalties as may be appropriate for repeat offenders.
- 5. Possible referral for prosecution.
- 4. "Misuse of the District's access to the Internet" includes, but is not limited to, the following:
  - a. using the Internet for other than educational purposes;
  - b. gaining intentional access or maintaining access to materials which are "harmful to minors" as defined by Arkansas law;
  - c. using the Internet for any illegal activity, including computer hacking and copyright or intellectual property law violations;
  - d. making unauthorized copies of computer software;
  - e. accessing "chat lines" unless authorized by the instructor for a class activity directly supervised by a staff member;

- f. using abusive or profane language in private messages on the system; or using the system to harass, insult, or verbally attack others;
- g. posting anonymous messages on the system;
- h. using encryption software;
- i. wasteful use of limited resources provided by the school including paper;
- j. causing congestion of the network through lengthy downloads of files;
- k. vandalizing data of another user;58
- l. obtaining or sending information which could be used to make destructive devices such as guns, weapons, bombs, explosives, or fireworks;
- m. gaining or attempting to gain unauthorized access to resources or files;
- n. identifying oneself with another person's name or password or using an account or password of another user without proper authorization;
- o. invading the privacy of individuals;
- p. divulging personally identifying information about himself/herself or anyone else either on the Internet or in an email. Personally identifying information includes full names, address, and phone number.
- q. using the network for financial or commercial gain without district permission;
- r. theft or vandalism of data, equipment, or intellectual property;
- s. attempting to gain access or gaining access to student records, grades, or files;
- t. introducing a virus to, or otherwise improperly tampering with the system;
- u. degrading or disrupting equipment or system performance;
- v. creating a web page or associating a web page with the school or school district without proper authorization;
- w. providing access to the District's Internet Access to unauthorized individuals;
- x. failing to obey school or classroom Internet use rules; or
- y. taking part in any activity related to Internet use which creates a clear and present danger of the substantial disruption of the orderly operation of the district or any of its schools
- z. Installing or downloading software on district computers without prior approval of technology director or his/her designee.
- 5. Liability for debts: Students and their cosigners shall be liable for any and all costs (debts) incurred through the student's use of the computers or the Internet including penalties for copyright violations.
- 6. No Expectation of Privacy: The Student and parent/guardian signing below agree that if the Student uses the Internet through the District's access, that the Student waives any right to privacy the Student may have for such use. The Student and the parent/guardian agree that the district may monitor the Student's use of the District's Internet Access and may also examine all system activities the Student participates in, including but not limited to e-mail, voice, and video transmissions, to ensure proper use of the system. The District may share such transmissions with the Student's parents/guardians.

- 7. No Guarantees: The District will make good faith efforts to protect children from improper or harmful matter which may be on the Internet. At the same time, in signing this agreement, the parent and Student recognize that the District makes no guarantees about preventing improper access to such materials on the part of the Student.
- 8. Signatures: We, the persons who have signed the Nettleton Public Schools District Handbook, have read this agreement and agree to be bound by the terms and conditions of this agreement.

Note: The Neighborhood Children's Internet Protection Act (PL 106-554, 47 USC 254 (h) (l)) requires districts to hold at least one public hearing on its proposed Internet safety policy. The regulations do not require this to be a special meeting and it is allowable for it to be part of a regular school board meeting.

#### Appendix C



Dr. Tom W. Kimbrell

#### State Board of Education

Dr. Naccaman Williams
Springdale
Chair

Jim Cooper Melbourne Vice Chair

Sherry Barrow Jonesboro

Brenda Gullett Fayetteville

Sam Ledbetter Little Rock

Alice Mahony El Dorado

Dr. Ben Mays Clinton

Toyce Newton Crossett

Four Capitol Mall Little Rock, AR 72201-1019 (501) 682-4475 ArkansasED.org

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## Technology Plan Addendum Approval Certificate for FY 2011-2012

The <u>Arkansas Department of Education</u> is certified by the Universal Service Administrative Company to approve technology plans for participation in the Schools and Libraries.

<u>Nettleton School District</u> has a technology plan addendum that has met the standards and criteria outlined in the following list.

#### This technology plan addendum is valid from December 6, 2010 until June 30, 2012.

Successful technology plans align the overall education improvement objectives with the following five criteria. To qualify as an approved technology plan for a Schools and Libraries Program discount, the plan must meet these criteria.

- The plan establishes clear goals and a realistic strategy for using telecommunications and information technology to improve education or library services.
- The plan has a professional development strategy to ensure that staff knows how to use these new technologies to improve education or library services.
- The plan includes an assessment of the telecommunication services, hardware, software, and other services that will be needed to improve education or library services.
- The plan provides a sufficient budget to acquire and support the non-discounted elements of the plan: the hardware, software, professional development and other services that will be needed to implement the strategy.
- The plan includes an evaluation process that enables the school or library to monitor
  progress toward the specified goals and make mid-course corrections in response to
  new developments and opportunities as they arise.

Jim Boardman
Assistant Commissioner
Research and Technology

12/7/10

Technology Plan Addendum
Approval Date

http://adetechresources.arkansas.gov/addendum/admin/prin.

### 1611000 - NETTLETON SCHOOL DISTRICT approved techplan addendum.

#### Approved on 12-06-2010

#### **Contact Information:**

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Item: Internet Access/Cable Modem

Goals for Internet Access/Cable Modem

Professional Development for Internet Access/Cable Modem

**Budget for Internet Access/Cable Modem** 

**Evaluation for Internet Access/Cable Modem** 

Item: Internet Access/Cable Modem

Goals for Internet Access/Cable Modem

To provide internet access that has adequate functionality and performance to enhance instructional strategies and the educational process. To increase data traffic flow which will allow teachers to utilize new technologies in the classroom.

#### Professional Development for Internet Access/Cable Modem

Provide training on access to educational and instructional strategies utilizing new technologies and resources available via the internet.

#### **Budget for Internet Access/Cable Modem**

Internet Access/Cable Modem per year \$12,120.00 Taxes per year \$600.00 Total Cost per year \$12,760.00

**Evaluation for Internet Access/Cable Modem** 

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Network capacity will be monitored by our IT department and by communicating with our staff. Effectiveness of new technologies will be assessed through testing utilizing The Learning Institute quarterly and locally developed tests.

#### Item: Internet Access/Wireless

#### Goals for Internet Access/Wireless

To provide students with an alternative to textbooks by utilizing online textbooks and access to supplemental materials via the internet.

#### Professional Development for Internet Access/Wireless

Training will be provided to staff in instructional strategies utilizing Netbooks as an alternative to textbooks.

#### **Budget for Internet Access/Wireless**

Wireless Internet Access/Data Package-per year \$194,750.00 Taxes per Year \$17,500.00 Total Cost per Year \$212,250.00

#### **Evaluation for Internet Access/Wireless**

Effectiveness of Netbooks will be assessed using quarterly testing through The Learning Institute and from feedback from the instructional staff and students.